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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/914,209

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Osamu Takada

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EXAMINER

AVELLINO, JOSEPH E

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/914,209	Applicant(s) TAKADA ET AL.	
	Examiner Joseph E. Avellino	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>herewith</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. Claims 9-28 are presented for examination.
2. In light of the Interview on June 27, 2006, The Office has withdrawn the finality of the previous Office Action

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 9, 10, and 18-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picher-Dempsey (U.S. 6,779,031 B1) (hereinafter Picher) in view of Choudhury et al. (USPN 5.933.412) (hereinafter Choudhury)

1. Regarding claim 9,

Picher taught a network system connected with a plurality of network domains, each of said domains configured of a communication node that enables to transfer an IP packet and process data, a network management system, a control server, and a plurality of end systems, characterized in that:

said end system located in any one of said network domains operates to transmit to said communication node a communication request in which the communication quality is guaranteed to another network domain (**from column 1 line 66 to column 2 line 1; and column 2 lines 63 –65**), said communication node having received said

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communication request operates to request a request for setting a communication path between said network domains to said network management system (**column 2 lines 1-4 and 65-66**), said network management system operates to determine if a network resource exists in said another network domain corresponding to the request for setting the communication path (**column 2 lines 4-8**), if yes, arbitrate said local network with said another network domain, and set the communication path in which the communication quality is guaranteed over both of said network domains (**from column 2 line 66 to column 3 line 6**).

Picher does not specifically teach the request for setting a QoS guaranteed path is broken up and converted into a set of requests for resource reservation and determine if the network resource element can be reserved on the basis of the qualification information of a request source having issued said reserving request and network resource allocating information. In analogous art, Choudhury discloses another resource request system which discloses the resource request (i.e. setup connections request from End Host A) (Figure 3) is broken up into a plural resource reservation requests for resource allocation (i.e. all switches are set up and reserved in parallel) and the request processing is performed by the control server (i.e. connection server) through the control network (i.e. the domain which controls the switches) (Figures 3 and 8; col. 7, lines 40-60). Choudhury further discloses an inter-organization arbitrating means which negotiates with another inter-organization arbitrating means provided in another control server with the another of the network domains to obtain a network resource corresponding to the request for the network resource (i.e. connection server,

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Figure 3). It would have been obvious to one of ordinary skill in the art to combine the teaching of Choudhury with Picher in order to allow an alternative to existing switch-by-switch sequential connection setup approaches, which reduces computer processing and latency between requesting a path and setting up the path.

4. Referring to claim 10, Picher in view of Choudhury disclose that if a network resource is not obtained in each one of the domains, the resource reserving means obtains a replacement network resource form the database and obtains a network resource corresponding to the replacement information (i.e. retry to reserve resources based on alternate switches/servers) (Choudhury: col. 10, lines 29-45).

5. Claims 18-28 are rejected for similar reasons as stated above. Furhtermroe Choudhury discloses the use of prioritized border resources as to what order to use switches for the reservation of data for QoS setup requests (col. 9, lines 1-24; col. 10, lines 28-45).

2. Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picher-Dempsey (U.S. 6,779,031 B1), hereinafter 'Picher' in view of Braden et al. (RFC 2205, IETF Network Working Group, September, 1997, " Resource ReSerVation Protocol (RSVP")) hereinafter 'Braden'.

3. Regarding claim 12,

Picher taught a system wherein the determination as to whether or not said reservation is enabled is carried out by determining if a requested bandwidth can be secured in a required timing as to one line leading from the requested communication node to the next communication node on the communication path **(from column 1 line 66 to column 2 line 8 and column 4 lines 5-10 and 39-65)**. Braden also taught reserving network resources, only if the requirement resources can be satisfied request **(pages 4-5, page 20 paragraph 4 and page 22 paragraph 1)**. Note that a starting and ending time are inherent in a session request.

4. Regarding claims 11,

Picher taught a system wherein, the request for reservedly setting a communication path in which the communication quality is guaranteed and the other request for promptly setting said communication path **(Braden: pages 4-5 and Picher: column 1 66 to column 2 line 8)**. Note that none of the references provide any teaching regarding delaying the reservation of the resources, implying that the determination of availability of resources is followed by the consequent reservation, which is done immediately. In deed reserving means keeping back or secure for oneself as for future use or special purpose, therefore it is more desirable to reserve the resources upon receiving the request, in order to facilitate keeping the resources unavailable for future requests. Picher taught session definitions in **column 4 line 39**.

6. Claims 13-17 are rejected for similar reasons as stated above.

Response to Arguments

7. Applicants arguments dated March 20, 2006 have been fully considered but are not persuasive.

8. In the remarks, Applicant argues, in substance, that (1) Picher in view of Choudhury do not disclose an inter-organization arbitrating means negotiates with another means provided in another control server within the other domain to obtain network resource corresponding to the request for network resource.

9. As to point (1) Applicant is incorrect. Applicant can clearly see in Picher that “the message including a request to reserve resources for transmitting the information, and means for monitoring the originating router to determine whether all the routers along the transmission path have sufficient resources to establish the path in accordance with the session request (col. 2, lines 1-10). The original “inter-organization arbitrating means” would coincide with the “originating router” and the “another inter-organization arbitrating means” would be any router outside of that particular domain. With respect to Figure 1, the original means would coincide with 114 and the another means would be any of routers 116, 118, 122, 126, and 134. This clearly shows means which obtains a network resource (i.e. reserving bandwidth) in another domain (i.e. the domains such as domain 150 corresponding to a WAN, LAN behind router 114, LAN behind router 126, and LAN behind router 134). By this rationale, the rejection is maintained.

10. All other arguments recite essentially the same subject matter as presented in (1) and are therefore addressed above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. The Office believes that if the limitations of claims 20-23 are moved to independent claim 9, and making other independent claims coincide with claim 9, the case would be allowable.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JEA
June 27, 2006